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Original Communications.

IMPROVEMENT IN CATARACT OPERATIONS.

By HENRY W. WILLIAMS, A.M., M.D. Harv., President of the American Ophthalmological Society, First Vice-President of the International Ophthalmological Congress at London, Professor of Ophthalmic Surgery in Harvard University.

In the great variety of treatment of eye disease which came under my observation in England and on the Continent at and after the recent Ophthalmological Congress, nothing was more interesting than the disposition everywhere manifested to adopt more reasonable and conservative methods of extraction of cataract in place of the vagaries which have found more or less favor during the last ten years. During this period, two methods especially have emanated from Berlin—extraction by means of scoops introduced within the eye, and the “new method” of von Graefe, termed “linear extraction.” Both of these were equally heralded as wonderful improvements upon previous operative procedures, and, according to the statistics furnished by their advocates, gave a larger percentage of success. Unfortunately, the same favorable results were not obtained in other hands, and the first of the methods, by outscoping, although much lauded for a time, has already met its fate and may be dismissed from notice. The second is still more or less employed, though I found it frequently so “modified” that its claims to legitimacy had become doubtful. The objections to this operation were many, and the six years since its conception have been too short a time to warrant the extravagant claims put forward in its behalf, since the frequency of secondary ill consequences, which might be predicted as almost certain to follow it, would, of course, be left out of sight in announcing the immediate results.

Among these objections, one of the fore-

most was the placing the incision so near the ciliary region, where all scientific oculists are agreed that wounds are dangerous as being liable to result, at some subsequent period, in sympathetic inflammation of the other eye. The chances of separation of the retina, the frequent loss of vitreous during the operation, the necessity for the removal of a part of the iris, and the long-continued manipulation of the eye required for the extrusion of the whole of the lens-fragments through the small wound, were other objectionable features of this method, which could only be tolerated if the proven results justified the clumsy and unscientific means. It seems now to be probable that the substitution of the very narrow-bladed knife of von Graefe for the broad, triangular knife will be accepted as the only permanent and true advance in ophthalmic surgery contributed by the “linear method,” the disposition to seek out a more excellent way being almost universal.

The method of M.M. Lebrun and Warlomont, of Brussels, of extraction by a “median section” through the upper portion of the cornea, practised, also, by M. Liebreich through a lower section, seems to offer the happy *tutissimus ibis*, between the large peripheral section of the cornea as originally practised, and the linear extraction. It is certainly more in accordance with the anatomical relations of the parts concerned in the operation, and thus better adapted to ensure the largest ratio of success. These reasonable expectations of good results seem to be fully justified, and I had an opportunity, especially at the clinique of M. Liebreich, to examine a large number of eyes recovered from this operation, where the optical conditions were excellent.

In doing this operation by the upward section, the narrow knife is entered through the cornea, at its very margin, at the point of termination of its horizontal axis, and is passed on in the direction of the diameter of the cornea to make the counter puncture

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at the opposite point. The incision is then completed, not parallel to the iris as in the peripheral section, but in such a direction that the apex of the slightly curved flap is opposite the upper border of the moderately dilated pupil. From its situation, and its adaptation to the curved surfaces of the lens, this section is most favorable for the easy exit of the cataract, which does not crowd forward and contuse the iris as in Daniel's method, but escapes readily through the pupil and through the wound. No mutilation of the iris is necessary, and the loss of any portion of vitreous humor is not likely to occur, whilst the form of the cut is best adapted for immediate healing.

There is little tendency to prolapse of the iris after this operation, and one of the great dangers of flap extraction is thus avoided, without the necessity for recourse to iridectomy. The scar of the incision soon becomes nearly imperceptible, and being beyond the field of the pupil at its ordinary dilatation it does not impede vision.

The importance of this innovation, already extensively adopted as a substitute for linear extraction, is my sufficient apology for bringing it thus soon to the notice of the profession in America, although I have as yet performed it only six times since my return home. But such a section of the cornea is not wholly a novelty with me. Having always been partial to extraction by some method not requiring iridectomy, I have, sometimes, in eyes where the cornea was large, made the incision terminate at some distance from the corneal border, and the excellent results in these cases would long since have induced me to adopt the "median section" as the best, had I not deferred to the opinions of various authorities who have insisted that wounds at the periphery of the cornea were most favorably situated for immediate union. My own experience, therefore, is not wholly limited to the success of these recent operations, but has been such as to prepare and induce me to accept the facts in favor of the median incision which I lately had opportunity to observe on a large scale in Europe, and I can confidently urge a trial of this operation as offering large chances of favorable results.

THE University of Munich, on its four hundredth anniversary, conferred the honorary diploma of Doctor in Medicine on Mr. Simon, F.R.S., D.C.L.

A CASE INVOLVING SERIOUS GUN-SHOT WOUNDS.

By H. W. SAWTELLE, M.D., Assistant Surgeon, U.S.A.,
Washington, D. C.

CORPORAL M. D. T., Co. I, 15th Mass. Vols., aged 32 years, a strong, healthy man, was wounded at the battle of Spotsylvania, Va., May 12th, 1864, by a musket ball entering the left thigh just above the external condyle, and, passing upwards and inwards through the muscles of the outer and anterior aspect of the thigh, severely lacerating the soft parts, emerged through the rectus muscle six inches above the knee; again entering at the left seventh rib and lodging. Another ball entered the upper third of left thigh posteriorly, and passing upwards and forwards, injuring the sciatic nerve, lodged and is still encysted near the sciatic foramen; it evidently impinges on the nerve, and accounts for the severe paroxysms of sciatica, which greatly disturb sleep. A third musket ball penetrated the abdomen and intestines in the left inguinal region and lodged. The patient was admitted to the Lincoln Hospital at Washington, D. C., May 26th, 1864, whence he was discharged from the service January 7th, 1865, and pensioned.

The injured thigh is seriously disabled and inefficient. A deep, broad and irregular cicatrix adherent to the femoral periosteum restricts the motions of the thigh and leg, which are affected with acute neuralgia, formication, and impaired nervi-motor function, with depressed temperature. The saphena veins of the thigh are affected throughout with varices. The missile was removed from the left side, and the patient suffers no inconvenience from that wound. The wound of the abdomen resulted in a fecal fistula, which healed about eight months subsequent to the injury, the contents of the bowels during this period being voided partly through this traumatic opening. The ball was discharged by the rectum, with the feces, four weeks subsequent to the reception of the wound. The fistula closed with a very thin and extremely sensitive cicatrix, the size of a quarter of a dollar, involving fascia, integument, peritoneum and intestines, which very much resembles a drum-head. The movements of gas and feces in the intestines can be distinctly felt through this membranous covering, and every jar or strain of the abdominal muscles gives rise to an acute pain at this point, and oftentimes nausea. In order, therefore, to lessen the tension of the muscles during de-

fecation, he assumes a partial standing posture and presses with the hand in the vicinity of the wound of entrance.

In 1871 this patient was very much reduced in flesh; he had a sallow complexion, and he wore a languid expression. The tongue was constantly coated, pulse irregular and thready, and the assimilative functions were seriously deranged, with functional disturbance of the heart. The hepatic region was tender on pressure, and the abdominal walls were tumid. The injury of the viscera evidently resulted in great derangement of the sympathetic system, which was perpetuated by local chronic peritonitis.

In the latter part of 1871, this patient was gradually failing, and no hopes could be entertained of permanent relief.

October 25, 1872.

FEEDING BY THE RECTUM.—With reference to the use of the pancreas of animals in the formation of nutrient enemata, a further communication on the subject, by Dr. Leube, appears in the *Centralblatt für Medizin. Wissenschaft.* (July 20). He says that the plan of obtaining the pancreas in the ordinary way from the butcher succeeds very well in the autumn and winter. In the warmth of summer, however, the gland very soon begins to undergo decomposition, and in consequence loses its digestive power, and becomes irritating to the intestine, producing rapid expulsion of the material injected. These mishaps may be easily avoided by making a glycerin extract of the pancreas. This extract is quite equal in digestive power to the fresh pancreas, and will remain good for several weeks. Dr. Merkel, of Nuremberg, has made several trials of this modification, especially in a case of iodine-poisoning; and the results have been equally favorable with those following the use of the pancreas itself. He describes the following as the best mode of making the pancreatic injection. The pancreas of a bullock (which is sufficient for three enemata) is finely chopped, and rubbed with 250 grammes of glycerine; and to each third of this, when about to be used, are added from 120 to 150 grammes of finely-divided meat. This mass is digested in the bowel as completely as the meat and pancreas mixture already described. It is important that the mixture of pancreas and glycerine with meat should be injected into the rectum as soon as it is made; for, if it be allowed to stand, the meat swells up, and the injection is thereby rendered difficult.—*Med. Times.*

Progress in Medicine.

REPORT ON DERMATOLOGY.

By JAMES C. WHITE, M.D.

[The writer has so recently expressed his opinions at length in an American journal* upon the present state of Dermatology, as well as with regard to the most prominent workers and writers in this department, that it would be needless repetition to offer in this report any prefatory criticism upon its general condition. The advances there noted were of so marked a character, chiefly in the field of pathological histology, as to make of modern dermatology almost a new science, and the progress since that time has been mainly in the same direction, but few new books or general treatises of importance having been published in the meantime. It is his purpose to present a brief notice of the current literature of this branch of medicine, confining himself principally to foreign sources of information as those least accessible to American readers. For a very complete record of the recent advances in this department previous to the present year, he would also refer to the admirable Boylston Prize Essay of 1871, by Dr. B. Joy Jeffries, of this city, which has been published by Alexander Moore.]

Skin, Hair, and Nails, their Care and Preservation, their Diseases and the Treatment of the latter. By Dr. A. KLEINHANS, Special Physician for Skin Diseases at Bad Kreuznach. With 27 Illustrations. Leipzig. 1871.

This little volume of 164 pages is one of a series of medical handbooks for the people, *Illustrierte Gesundheitsbücher*, of which similar treatises on the teeth, the eyes, the ears, the lungs, &c., have already appeared, written by specialists in these various departments. Dr. Kleinhans is the author of a general work on skin diseases, published in 1866, which, although small, is a very good book both for student and physician. He seems to have done the peculiar work required of him for this publication, too, very satisfactorily. It is no easy task to write down to the understanding of the general public, and at the same time lead them up that long stretch to the level upon which they should stand in knowledge relative to their bodies in health and disease. We have first chapters describing the anatomy and physiology of the skin, and their relations to the functions of the body, and

* American Journal of Medical Sciences, April, 1871.

to external influences; then accounts of its changes and appearances in the common diseases to which it is subject, with remarks upon their causes and natural course; and rules for its care in health. Then follow, what we think were far better omitted from all similar works, instructions as to treatment by remedies in disease. It is giving that little knowledge which is often dangerous, never useful. Arsenic and mercurial preparations are used injudiciously enough by physicians, without the extension of such license in their employment to patients as well. The hair and nails are treated of on the same general plan. The final chapter is on the nature of the various popular cosmetics for the skin and hair, and the author does good service to these as well as to the pockets of his readers, by showing how cheap, how dangerous, and yet how useless are many of these fashionable and attractively named preparations, for which they pay such exorbitant prices.

The wood-cuts, illustrating the anatomy of the various cutaneous tissues and the animal and vegetable parasites of the hair, are excellently done as a whole. If "Die Haut" of Dr. Kleinhaus is a fair sample of the whole series, its publication is a handsome and useful addition to the literature of the German people.

Diseases of the Hair: A Popular Treatise upon the Affections of the Hair System, &c. By BENJAMIN GODDARD, M.D., F.R.C.S. London and Philadelphia. 1872.

"It needs no excuse or apology," the author says in his preface, "for bringing before the world a subject much neglected by the faculty, I mean diseases of the hair. . . . The demand for more light upon this much neglected subject led me to give some years of study to this department, and the following pages I offer to the public as a small addition to the general stock of hair literature." This remarkable book, dedicated to the "heads of Great Britain," is in object similar to, though in scope more restricted than that of Kleinhaus above noticed; it is in every way, however, unlike it. Instead of presenting to the profession something new or valuable as the result of his "years of study," or the public with simple and practical instruction, he has spent his time in collecting and putting together, under chapters designated by the title of the various affections of the hair and scalp, a mass of anecdote and petty science, a jumble of truth and fable, which is worthless to the physician, not wholly

uninstructive but uncommendable to the people. Even as a popular treatise it was not needed, for it is far inferior in reliability and information to the little work of Dr. Beigel, of London, on the human hair, published in 1869, a praiseworthy book in all respects; and in point of poetical quotation and historical anecdote, to several well-known books on the toilet.

A quotation or two in illustration of the writer's style, and a few words or phrases as specimens of his notion of fit language for common people, selections such as might be made from nearly every page, will sufficiently reveal the character of this addition to the "stock of hair literature." "The soft down of the peach, reflected upon the head of the infant, the ripple of the stream mirrored upon the wavy lock of childhood, or the autumnal hue of the dying leaf, living upon the grey hair of the aged man, all speak in accents powerful to the reflective mind"; from the first page. In another part the physician sees "a child, with its highly sensitive nervous system, the skin thin and transparent, like the waters of a deep lagoon, blue veins meandering upon its surface like rivulets feeding the stream, the ready blush upon the cheek, resembling ripened fruit, and the bright, large lustrous eye, that looks as if it could fathom eternity; then over this the long black or brown eyelashes, and the silken hair floating in the breeze."

Much hair is "exuberance of comate structure"; the head is "a pate"; a man is "a human"; one's hair is one's "crinial" or "comate covering"; and, finally, pulling out all the hair is "aberuncating every hirsute habitant."

On the Treatment of Diseases of the Skin: with an Analysis of Eleven Thousand Consecutive Cases. By Dr. MCCALL ANDERSON. London: 1872. Pp. 180.

DR. ANDERSON is well known as the author of some excellent books on skin diseases, and a new work by him will be received with great interest. The first part of the present volume contains the statistics of 10,000 consecutive cases of skin disease met with in hospital practice, and of 1000 in private practice, arranged in tabular form according to a clinical system of classification. He divides these affections into two great classes—namely: functional; and organic. The organic is subdivided into two classes—I. Those defined by uniform causes; II. Those not defined by uniform causes. The diseases defined by uniform causes are arranged under four heads

—namely: 1, parasitic affections; 2, syphilitic affections; 3, strumous affections; 4, eruptive fevers. The diseases not defined by uniform causes comprise all affections of the skin not included in any of the preceding groups, and are arranged pathologically under three heads—namely: 1, inflammations; 2, new formations; 3, hæmorrhages.

We will not stop for a critical examination of this system, open to serious objections as such, as it is used mainly for grouping the two series for comparison. Among the functional affections in his list of private cases, the most noticeable feature is the very small number of patients with alopecia, 18 only in 1000; with us the percentage would be much higher. Concerning the vegetable parasitic diseases, he still holds to the opinion that there are four distinct fungous growths, productive of four distinct affections, which under no circumstances are transmutable. These are *Tinea favosa*, *Tinea trichophytina*, *Tinea versicolor*, and *Tinea decalvans*. The relative frequency of these affections in Scotland and America will be seen by comparison of the number of Dr. Anderson's cases per thousand in private practice with those among similar patients here. *Tinea favosa* in Glasgow four, in Boston one; *Tinea tonsurans* in Glasgow thirty-six, in Boston eighty-one; *Tinea versicolor* in Glasgow fifteen, in Boston thirteen. With regard to the position and nature of the fourth, *Tinea decalvans*, Dr. Anderson continues to entertain no doubt of its parasitic character, and offers as the reason why the fungus is so generally overlooked, that it is very small compared with other vegetable parasites, and implicates the sheath of the hair rather than the hair itself. Whether the affection be parasitic in a small proportion of cases only, as we believe, or almost uniformly so, as the author thinks, while this uncertainty about its pathology remains unsettled, a comparison as to its relative occurrence in the two countries in this connection would be useless. *Lupus* is classed among the affections due to some uniform cause. This may be admitted as a plausible theory, but when the particular cause is specified as strumous, then we must ask for reasons before accepting it, unless a wider and even more indefinite significance is allowed that very unsatisfactory term than is now generally attached to it. That the author's definition is of this latitude, the following extract will show: "It is a mistake to suppose that warts are mere local affections; indeed, I

have little doubt that they are remotely connected with the scrofulous diathesis—that they are what we may call, in imitation of our friends across the Channel, 'a benign scrofulide,' as they are specially apt to occur in persons of a scrofulous habit, and as strumous affections very often take on the warty character." The great rarity of prurigo in America, which has been noticed here by all who have learned to recognize it in Germany as a disease of frequent occurrence, is paralleled by its infrequency in Great Britain, Dr. Anderson's figures showing but three cases in both series of 11,000. Psoriasis occurs in surprisingly large proportion to eczema, 831 of the former to 2,875 of the latter. This may be explained possibly by the fact that its obstinacy and tendency to recur through life lead every case to seek medical advice at one or another period of its existence. On page 53, we find it stated that the three diseases alone capable of affecting the whole body are pemphigus, pityriasis rubra, and lichen ruber. If the author has never had a case of universal eczema to treat, his experience is more fortunate than that of some other dermatologists.

The second and larger part of the book is devoted to the therapeutics of diseases of the skin. With regard to the danger of "driving in" an eruption, about which much popular error exists, not altogether without the occasional support of physicians, the author says, "I am quite convinced that there is very little reason to dread such an occurrence." . . . "Those who are most intimately acquainted with the treatment of diseases of the skin, will probably agree with me in thinking that the difficulty lies, not in curing them sufficiently slowly, but in curing them with sufficient rapidity." The remedies most serviceable in these affections are considered under the heads of local and internal. Among the former, after some general statements respecting their action, he discusses the use of baths, absorbent powders, poultices, soothing ointments and lotions, empyreumatic oils and their derivatives, creasote and carbolic acid, potash applications, mercurial applications, sulphur, impermeable dressings, caustics, blisters and parasitocides, all capable of accomplishing much good or evil, accordingly as they may be used understandingly or not. The special objects for which they are to be employed, and the method to be followed in their application, are described with judgment and that observance of detail which betoken the experienced dermatologist.

Dr. Anderson is a strong advocate for the utility, if not for the absolute necessity of constitutional treatment in connection with local remedies, and, although less urgent for its universal employment than most English writers, he resorts to it far more commonly than his German teachers. Purgatives or aperients he finds of service in a large proportion of cases at the outset, and with regard to the use of mineral waters, which stand so high in popular estimation the world over, he gives the very sensible advice that it is always better to send the patient to the spring itself, "for he is thus certain to get the waters fresh and pure, and, away from home and the fatigues and anxieties of business, his body is at the same time invigorated and his mind refreshed." Alkaline medicines he finds very useful in skin diseases occurring in rheumatic subjects. In the efficacy of cod-liver oil, he is a firm believer, in many affections which are not strumous. Tar and carbolic acid he administers in some diseases with benefit, he thinks, and recommends the trial of the alkaline sulphites and hyposulphites in those depending on morbid ferments. In relation to arsenic, which he considers the great cutaneous tonic, he offers the following aphorisms:—

"1. Arsenic, judiciously administered, is as safe a medicine as any in the Pharmacopœia, and may often be used for months without injury to the general health.

"2. It often requires to be continued for many weeks, and sometimes the disease seems to resist its action for a considerable time, when all of a sudden improvement occurs, followed by a rapid cure.

"3. It requires to be given in proportionately larger doses to children than to adults.

"4. Infants may be subjected to its influence by administering it to their nurses.

"5. The dose should be at first small, and not increased, as a rule, for some time. Then it may be gradually increased till the medicine disagrees, or till the disease begins to yield, when it may be gradually be diminished.

"6. It should not be omitted altogether without very good reason, but may be tried in smaller doses or in another form, or omitted for a few days, till the bad effects have passed off.

"7. Puffiness of the face, or irritation of the eyes, or such like physiological effects, if slight in degree, should not lead us to discontinue the medicine; indeed, it is

sometimes only then that its beneficial action on the disease is observed.

"8. It is decidedly contra-indicated in acute cases; and when its use is followed by marked increase of irritation of the skin (itching, heat, &c.), the disease is probably not in a state to be benefited by it.

"9. It is generally more rapidly effectual if the disease, though in a chronic state, is recent; and the first attacks yield more readily to it than subsequent ones, as a rule.

"10. It is contra-indicated in most cases which are complicated with digestive derangement.

"11. It is apt to produce bronchial catarrh, so that patients should be warned to avoid exposure to cold while taking it; and for this reason it is generally contra-indicated in persons laboring under bronchitis.

"12. In exceptional cases it may be given with benefit in large doses.

"13. It sometimes requires to be given during meals, or immediately after food is taken, for when administered on an empty stomach it occasionally deranges the digestive organs; and it is often better tolerated if given along with a bitter infusion.

"14. It should not, as a rule, be entirely discontinued until some weeks have elapsed since the complete disappearance of the eruption.

"15. There are few chronic diseases of the skin of constitutional origin—provided they are not syphilitic—which may not be benefited by it (although often other treatment is to be preferred to it), but it is especially valuable in psoriasis, pemphigus, lichen ruber, pityriasis rubra, and in many cases of eczema; unless contra-indicated as above."

The book, on the whole, although necessarily from its character ranking below the author's other publications, is full of practical information, and one of the most valuable contributions to dermatology published in a separate form during the year.

VIRCHOW'S Handbuch der Speciellen Pathologie und Therapie. Hautkrankheiten.

SINCE the preparation of the present sketch of the notable contributions to dermatology during the past year, there has been received through the kindness of the author, Dr. Kaposi (Moritz Kohn), most unexpectedly the second Lieferung of the second part of Hebra's great work on Skin Diseases. Its publication at this time brings with it a striking contradiction to our introductory statement that no book of

unusual importance had appeared during the year, for it may safely be said that never before has a single volume appeared of equal importance to the literature of dermatology, covering as it does a field of cutaneous pathology from which previous writers have cautiously held aloof. We have long felt the darkness which covered it, the pressing need of the light which could be thrown upon it from one source alone. Now for the first time the gates to that great storehouse of facts and of observations which a master has been collecting through a lifetime are thrown open, even though it be by the hands of another, and all this vast experience is ours. It is well, too, that it was withheld so long, for it is only within the past few years that that special knowledge of the anatomical changes of the skin in disease has been acquired by the young school of dermatology, which has revealed to us so many secrets of the inner nature of these affections. Among the workers in this newer field of research, Dr. Kaposi has been one of the most able and indefatigable. With the fruits of his own microscopical labors, and those of the many other ardent investigators of the modern school at command, it will be recognized how peculiarly fitted he is to make known to the world the unparalleled clinical experience and ripened opinions of his distinguished father-in-law, Professor Hebra. With such a combination of resources alone could one approach the subjects which form the contents of the present volume, for they comprise the VIIIth and IXth classes of Hebra's classification, the new growths of the human skin.

The mere mention of this term calls up the whole vast field of research, which has been so diligently worked since Virchow founded the modern system of pathology, and the many questions of startling interest connected with it which have recently arisen. With all the light which late investigations have thrown upon the anatomical changes in the pathological processes of the cutis and epithelium, it will be seen how different are the views now held concerning these affections from those entertained when Hebra originally divided them into distinct classes in his system—the benignant and the malignant—and how difficult the undertaking to apply to all these heterogeneous groups of affections the lessons of our latest science.

Dr. Kaposi has accomplished this task in a manner which leaves nothing to be desired. The subjects are treated at great

length and with careful reference to the literature of the past and the researches of contemporaries. The same attention is given to the minute details of treatment, which has made the preceding writings of Hebra so useful to the practitioner. In the short time at command since the volume was received, even if space permitted, it is possible only to give a list of its contents; a critical notice, to do justice, would require extended study to prepare.

The diseases treated of are arranged in the following order:—

CLASS VIII.—Benignant new growths.

1. Of fibrous tissue.
Keloid. Cicatrix. Molluscum fibrosum. Xanthoma.
2. Of vessels.
Angioma. Vascular new growths.
Telangiectasy. Nævus vascularis.
Angio-ephephantiastis. Tumor cavernosum.
- Lymphangioma. Lymphat. new gr'ths.
Lymphangioma tuberosum multiplex.
3. Of cells.
Rhinoscleroma. Lupus erythematosus.
Lupus vulgaris.

CLASS IX.—Malignant new growths.

1. Lepra.
Lepra tuberosa. Lepra maculosa. L. anæsthetica.
2. Carcinoma.
Epithelioma. Carcinoma lenticulare, tuberosum, melanodes.
3. Sarcoma.
Sarcoma idiopathicum multiplex.

The volume contains 282 pages. Two more classes yet remain to complete the work—the Neuroses and Parasitic Affections. With Dr. Kaposi's zeal and industry we shall not have long to wait.

The Anatomy and Development of Rodent Ulcer. A Boylston Medical Prize Essay for 1872. By J. COLLINS WARREN, M.D.

PERHAPS no affection of the skin has been so long ignored or misjudged as this, certainly none so conspicuous in its manifestations. Until within a very short time, nearly every disease of the skin of the face characterized by a destructive process has passed for lupus with surgeons, and notwithstanding Hutchinson painted its clinical features so vividly that rodent ulcer should never again have been unrecognized, it has continued to be confounded with the former in surgical diagnosis, both in books and practice. Such instruction as Dr. Warren attempts to give in this essay, therefore, has long been needed to fix its

relations to ordinary epithelioma on the one hand and to separate it from other forms of cancerous growth. The anatomical and clinical characters of lupus have long been so well defined that their individuality should never have been misinterpreted.

After a brief description of the gross appearances of the affection and an account of the literature pertaining to its pathology, five cases are reported, which furnish the anatomical material for the investigations upon which Dr. Warren's views of the nature of rodent ulcer are based. For the details of these observations, representing an amount of patient and skilled labor, that only an accomplished microscopist, educated in the modern German methods of manipulation, can appreciate, we have no space; it is only his conclusions, the results of these researches, that can be given. These are: 1st. All those cases of rodent ulcer examined are forms of epithelial cancer. 2d. They differ from those forms of epithelial cancer, of which cancer of the lower lip is the type, in the small size of the epithelial cells. 3d. These ulcers may be divided histologically into two different groups, according to the arrangement of the cancer-cells, viz., into tubular and alveolar.

As to its relations to other forms of cancer of the skin, and the classification of cancers in general upon an anatomical basis, the following opinions are expressed after a discussion of these questions. Two forms of cancer are recognized; 1st. The large-cell variety, or the infiltrating form, for which we may select cancer of the lower lip as a type; marked by a greater degree of malignancy, both in the more rapid growth and in the liability to an infection of the neighboring lymphatic glands, or of more distant parts. 2d. The small-cell variety, the most typical form of which is the rodent ulcer, characterized by a slow growth, and very rarely followed by an infection of distant parts.

Then follows an elaborate sketch of the views of the many microscopical investigators of the present day with regard to the development of cancer and its relations to the various elements of the tissues in which it is found. This portion of the essay deals with some of the most difficult and important questions in modern pathological anatomy. As the result of his observations in these cases bearing upon the points above referred to, he finds that in certain cases—1st. The formation of cancer-cells is preceded by an escape of the white blood corpuscles through the walls of the vessels,

and an accumulation of similar cells in the adjoining lymphatic canals. 2d. That this is followed by an apparent transformation of these cells into cells resembling strongly the epithelium of the rete malpighii. 3d. That the epithelium of the parts affected does not appear to take an active part in the process, but may exert a certain influence on the character of the formation taking place. 4th. That the cancer-cells lie in the lymphatic spaces of the connective tissue, and do not invade, to any appreciable extent, the lymphatic vessels. In the low formative power of the elements, the absence of power to multiply themselves to any extent, their extremely short-lived character, and their inability to invade to any extent the lymphatic vessels, he finds that combination of peculiarities which make rodent ulcer the type of the mildest form of cancer.

The characteristic changes in the structure of the skin upon which these views of the anatomy of the disease are based, are clearly shown in the fine drawings which accompany the essay. The plates were beautifully drawn upon stone by Dr. Quincy. It is with just pride that we can say of this valuable contribution to surgical pathology that no better work of the kind has ever been done abroad or at home.

Etude sur la Pathologie des Glandes Sebaceées.
Par CAMILLE MISSET, Docteur en Médecine de la Faculté de Paris. Pp. 125. Paris. 1872.

This monograph begins with an introductory chapter on the anatomy and physiology of the sebaceous glands, and on the etiology and pathological physiology of the affections of which it treats. These affections are mainly those ordinarily included in this class, but arranged, subdivided and re-arranged in groups according as they are supposed to be the result of, 1st, inflammation; 2d, lesions of secretion; 3d, lesions of nutrition. We find thus from twelve to sixteen varieties of acne described in scattered positions throughout the book, destroying thus the only merit which some monographs may claim, that of presenting in a concise and convenient form for reference subjects elsewhere widely distributed, or making part of large and general treatises. This one scatters what may be found in much better form and of far better quality in other works. The author has fallen far short of giving us a complete account of the recent acquisitions to our knowledge of the anatomy and pathology of these important affections, and fails to make good such omissions by offering us anything new of

value. Three of the plates are very good pictures of cases of hypertrophy of the nose, the Pfundnase of the Germans.

Du Traitement des Tumeurs Sous-cutanées par l'Application de la Pâte sulfo-safranée, et de l'Action de l'Acide Sulphurique sur la Peau. Par le Dr. NEYRENEUF. Pp. 84. Paris. 1872.

THE first part of this work gives us an account of some experiments with regard to the action of monohydrated sulphuric acid upon the dead and upon the living skin. In the second part the author considers the application of one of these pastes in the treatment of subcutaneous tumors, the paste used, called by Velpéau caustique sulfo-safranée, being prepared as follows: Two parts of the acid and three parts of saffron are triturated in a glass mortar until a homogeneous paste of a beautiful black color and good consistence is obtained.

Upon the dead skin the application of the concentrated acid gave the following results: At the ordinary temperature a greater transparency, a yellow color, shrivelling, and a very appreciable retraction. If the action of the acid is prolonged and that of heat added, we have the separation of the epidermis, a deep brown coloration, and the transformation of the elements of the skin into gelatine. It is also demonstrated that sulphuric acid penetrates the skin by endosmosis, and is absorbed by it; that the action of the acid in a liquid form and of the sulphuric paste are alike; and that the desiccation of the paste may be obtained by placing it in favorable conditions of temperature and for absorption.

Applied to the living skin sulphuric acid spreads, penetrates the tissues and renders them transparent, leaving a red surface marked with black streaks or islets, due to the coagulation of the blood in the vessels. An eschar is formed which quickly becomes dry, hard and insensible. The desiccation increases more and more, and under its influence the transparency nearly entirely disappears. At the end of several days the skin has taken a deep yellow tint, resembling that of glue à bouche. These changes are accompanied by a very acute pain, lasting not more than three or four hours. Not a trace of inflammation can be observed, and the separation of the part is accomplished from the sixth to the fortieth day, the cicatrization taking place without supuration.

The sulpho-safranée paste, when applied in suitable proportion, produces an eschar of its same size, not exceeding in depth the limits of the skin. This action is produced

by the coagulation of the blood, which, by arresting the circulation, becomes the cause of the gangrene. Partial gelatinization of the mortifying tissues and their desiccation follow as secondary phenomena. The separation of the eschar takes place from the sixth to the fortieth day, showing a cicatrix of good quality, without induration and without contraction of the skin. Neither during the mortification of the tissues, nor at the moment of formation of the eschar, nor during the period of separation are any traces of inflammation observed.

According to the author, Dr. Chairole was the first to apply this peculiar action of the acid-saffron paste to the treatment of benignant subcutaneous tumors. The growths in which its use has been followed by the best results are sebaceous cysts, lipomata, and enchondromata. It is as an acquisition to our knowledge of the action of sulphuric acid upon the skin that we notice the book here, believing that it will prove to be a more serviceable contribution to medical jurisprudence than to therapeutics.

On the Absorption of Insoluble Substances in Mammals. By HEINRICH AUSPITZ.

This little reprint from the *Wein. Medizin. Jahrbucher* of 40 pages, received from the accomplished author, has already been placed before American readers in abstract, and has been noticed everywhere with well-deserved praise. It needs, therefore, but brief notice in this record, although one of the most important contributions to the physiology of the skin. It contains the descriptions of 45 experiments undertaken by Dr. Auspitz to settle some of the disputed points in connection with this question, that of the power of the skin and mucous surfaces of the body to absorb insoluble matter in a finely divided state. The work was ingeniously and faithfully done, and is recorded in detail, with a history of the observations and conclusions of earlier experimenters in the same field. Several series of experiments were undertaken. 1st. Injections of starch-meal into the venous system; 2d. Injections of starch suspended in water into the abdominal cavity; 3d. Injections of the same into the subcutaneous cellular tissue; 4th. Injections of starch suspended in oil into the abdominal cavity; 5th. Injections of the same into the subcutaneous cellular tissue; 6th. Examination of the ductus thoracicus for starch after its injection into the abdominal cavity and subcutaneous cellular tissue; 7th. Inunction of starch into the skin of animals and men.

As the grand result of all these experi-

ments, he offers the following conclusions: That in mammals insoluble material bodies, as starch granules, may gain entrance, 1. From the abdominal cavity; 2. From the subcutaneous cellular tissue into the circulation first of the lungs, and from there into that of the body generally; 3. That they pass through the lymph vascular system in order to enter the veins (although whether they are absorbed exclusively in this way is not yet definitely determined); 4. That the epidermis is always a considerable obstacle, relative but not absolute, to absorption from the surface of the skin; 5. That absorption is essentially aided through the medium of fat, which gains entrance to the circulation in the same way as, though still more easily than, starch. Dr. Auspitz adds, in conclusion, that these same laws may apply as well to other insoluble substances capable of fine division as to starch and oil, a probability not contradicted by his experiments with mercurial inunction.

On the *Physiological and Pathological Anatomy of the Lymph vessels of the Human Skin*. Bielsiadecki. (*Archiv fur Derm. und Syph.*, Drittes Heft, 1872.) As the result of his observations at Krakau, B. offers the following conclusions:—1. That a more intimate connection exists between some of the blood and lymph vessels of the corium, and that in the subcutaneous cellular tissue the latter possess special blood-vessels mainly distributed to themselves; 2. That certain pathological changes of the skin also confirm this observation, inasmuch as (a) in syphilitic induration of the prepuce the lymph vessels are noticeably enlarged; (b) the lymph vessel which runs from the indurated prepuce to the subcutaneous fibrous tissue of the dorsum penis is filled with a fibrinous coagulum partly disintegrated, partly organized, and the wall of the lymph vessel shows numerous exudation cells, which are wanting in the surrounding fibrous tissue; and (c) inasmuch as hereditary cutaneous tumors occur in which the lymph vessels are distended with cells, while the neighboring tissues show only slight changes. 3. The hardness of a syphilitic induration arises in part from a fibrous tissue new formation.

Transplanted Cuticle and Skin. (*Archiv fur Dermat. und Syph.*, Drittes Heft, 1872.) Reverdin (*Comp. Rendu.*, lxxiii.) describes the histological process as observed in his numerous experiments as follows:—The transplanted pieces never consist wholly of epidermis, but always of thicker or thinner portions of the cutis as well. They may

be taken from various individuals of the same species or from individuals of different species. They grow upon white men when taken from negroes and rabbits; and upon rabbits pieces taken from rabbits, from cats, and from men continued to grow.

When the transplanting succeeds, the graft is firmly fixed after twenty-four hours, and appears swollen and wrinkled. On the third day there is formed around it a smooth red ring, and it lies depressed below the level of the granulations. From and after the following day the red ring grows gray and by degrees white, and cicatrization progresses in the same way.

The islets formed in this way are of quite regular round form, if the graft is removed some little distance from the edge of the wound on all sides. When it lies near the edge, or when two pieces of skin are placed near each other, then the development of the epidermis is more pronounced in places where the two cicatrizing edges lie nearest each other. The islets then assume an elongated shape, send out projections in this direction, and in this way very elongated, narrow cicatrizing points may be formed.

If the grafts are taken from a pigmented skin (that of a negro or black cat), they gradually lose their color and finally become perfectly white, while the islands forming around them show no special pigmentation.

The microscopic examinations were made with the assistance of Ranvier upon frogs, the preparations being hardened in chromic acid and colored by carmine. If the graft is forty-eight hours old, its epidermal walls will be found desquamating. Their nuclei show the vesicular modification described by Ranvier. On the borders of the transplanted skin the epidermis extends itself only a little way above the granulations; elsewhere, however, it penetrates between the derma and the granulations, and sends out constantly at this level a more or less deeply penetrating continuation. It is in this way that the graft always seems to attach itself in the beginning. The projections emanating from the epidermis are always in intimate connection with the embryonic tissue of the wound.

Gradually the epidermis extends farther and farther towards the surface of the wound, and a six days' old transplantation offers the following conditions:—The epidermal cells of the graft are found in the same state of desquamation and of vesicular alteration of their nuclei as in the stage above sketched. The epidermal outgrowth

surrounding the graft and penetrating the depths of the wound has become strongly developed. From the upper edge of the piece there stretches an epidermal layer of varying thickness, from the deep surface of which new and often quite voluminous and irregular buds project, which penetrate the embryonic tissue. At the bottom there are often found epidermal balls, resembling the peculiar balls of canceroid. The fibrous foundation of the graft is also found changed after six days, being pierced by embryonic vessels, which communicate with those of the granulations, and the fibrous tissue presents generally the embryonic character of the granulation tissue. From these observations Reverdin concludes:—

1. The attachment of the graft is accomplished first, by means of the epidermis, and, second, through the fibrous tissue beneath.
2. The epidermis exercises a sort of contact effect, by which the bordering embryonic surface is forced to convert itself into epidermis.

Ollier (same journal, from *Tribune Med.*, Mai, 1872) makes use of pieces cut from the entire thickness of the cutis for transplanting, and obtains, according to his statements, in place of a cicatrix the normal tissue of the cutis, and prevents cicatricial contraction. He has also lately succeeded in transplanting a portion of periosteum upon a granulating surface. In earlier attempts on animals he had obtained a new growth of bone by transplanting periosteum removed from animals twenty-four hours after death, and assumes from this a similar duration of vitality for the cutis.

(To be continued.)

APOTHECARIES.—The first apothecaries lived at Naples. By the edict of Frederick II., it was required "that the confectionerii should take an oath to keep by them fresh and sufficient drugs, and to make up medicines exactly according to the prescriptions of the physicians." The first mention made of an English apothecary occurs in the reign of Edward III., who, it is said, bestowed, in the year 1345, a pension of sixpence per day on Coursus de Gangeland, an apothecary of London, for taking care of and attending his Majesty during his illness in Scotland. They were established in France and Germany about the time they were introduced in England. There was no apothecary's shop in Halle till the year 1493.

Reports of Medical Societies.

SUFFOLK DISTRICT MEDICAL SOCIETY. REPORTED FOR THE JOURNAL.

The Society met November 30th, the President, Dr. Lyman, in the Chair.

Removal of a Uterine Polypus.—Dr. Bixby showed a polypus which he had removed from the uterus by the ecraseur. Three years ago, the patient had had a similar tumor removed of the size of a foetal head.

For a year or two, she had continued well, and then began to exhibit symptoms of renewed trouble; for the last year she had had constant menorrhagia. The polypus in this case had been found protruding from the os and attached by a small pedicle.

Operation for Relief of Glaucoma.—Dr. H. W. Williams mentioned a case where he had operated in a case of glaucoma under circumstances which were apparently very unfavorable. An old lady, leading generally a very quiet life, had had loss of vision a year ago; she had, however, been restored to sight, and no symptom remained except a certain amount of dimness of vision on Sundays, at which time her nervous system was stimulated to an unusual degree. Two weeks before she was seen by Dr. Williams, she had been attacked with pain about the left eye, which was supposed to be due to facial neuralgia. As the blindness became greater, however, and the other eye was getting dim, she had applied for relief. At that time, Dr. Williams found marked symptoms of glaucoma in an advanced stage in the right eye and, to a less degree, in the left. The pain was very severe, the sight was almost entirely wanting, and the ophthalmoscope failed to reveal the base of the eye on the right and imperfectly on the left. He performed iridectomy in both eyes, with immediate relief to the pain and with a considerable increase of visual power. The case showed that it was not advisable to abandon cases even in the most advanced stage.

In another case, the symptoms had continued so long that but little improvement in vision had been obtained from the operation, but the pain had been relieved at once, so that on the access of the disease in the other eye, the patient had, of her own accord, immediately applied for treatment.

Constipation Relieved by Electricity.—Dr. Webber reported the case of a woman, 60

years of age, who, for thirty years, had constipation of the most aggravated character. She had taken enormous amounts of medicine, but had never obtained relief to the bowels without enemata and the persistent use of cathartics. On the first of October, Dr. Webber had commenced the use of the Faradaic current, applying one pole in the lumbar region and the other on the abdominal walls; it was repeated on the next day, and on the following day the patient had one or two discharges. The treatment was continued for two or three weeks, until she had had fourteen applications, since which time the discharges had been natural. She is now considered cured. It was noticed at first that the patient was tolerant of an exceedingly strong current, but that as the bowels began to regain their contractility, the anaesthesia disappeared. Dr. Webber had seen six cases of a similar character lasting a longer or shorter time and yielding to electricity. In one case diarrhoea had been excited, which ceased on stopping the electricity. All these cases showed a greater or less tolerance to a powerful current as the constipation increased or diminished.

Dr. Fisher considered electricity to be a nerve tonic, and had been struck with its effect, as well as that of opium, in relieving constipation in cases complicated with nervous debility or melancholia.

Dr. Williams suggested that the coarse food used for such a length of time by the patient with a view to relieving the constipation, might have acted in the opposite way by causing undue distention and consequent paralysis of the intestine.

Ovariectomy.—Dr. Bixby stated that the case of ovariectomy reported by him at the last meeting had entirely recovered. Notwithstanding the adhesions which were found to exist almost universally, the patient had made a better recovery than another in whom no adhesions existed.

Case of Emphysema.—Dr. Cowles exhibited a patient, about 40 years old, who had no tendency to pulmonary disease, either hereditary or acquired. In January last he had acute pleurisy. He was first seen by Dr. Cowles in March. He then presented the usual signs of a large accumulation of fluid in the right pleural cavity, together with a cough and dyspnoea, profuse sweating and hectic. March 16th, an exploratory puncture was made between the ninth and tenth ribs, and forty-eight ounces of pus were drawn off by Dr. Bowditch's method, with great relief to the patient. On the 19th of April he had

a severe chill, and on the 22d the symptoms of emphysema having returned, and being quite as urgent as before, paracentesis was performed, and twenty-four ounces of pus removed. He had for a time previously expectorated pus quite freely. May 17th, paracentesis was again performed, thirty-two ounces of pus removed, and the cavity, then holding about a pint, washed out with water and carbolic acid. The canula was left in place, but it became necessary to remove it. May 29th, sixteen ounces were drawn off, and again, on June 10th, eighteen ounces. A gum-elastic catheter was inserted and fixed permanently in the wound. From that time to the present the patient has been cared for by his wife, who has washed out the cavity daily. It now holds only about an ounce. The man has increased seventeen pounds in weight. The lung has not thus far expanded to any marked degree.

Dr. Buckingham mentioned a similar case which had come under his own notice.

Thrombus of Vulva.—Dr. S. Cushing reported a case of extravasation of blood which had taken place in a young woman, about 20 years of age, three fourths of an hour after labor had terminated, causing a considerable protrusion of the perineum and labium. It caused no inconvenience, except by its size. Five weeks later, Dr. Sinclair saw the case in consultation, and removed the coagulum by an incision through the perineum.

Dr. J. B. S. Jackson recalled one or two cases, previously reported to the Society, where patients had experienced severe hæmorrhage from the organs of generation from accidents during pregnancy or labor, one of which had proved fatal.

Dr. Bixby had seen similar cases, in which he had opened the sac, removed the coagulum, and destroyed the sac by acid nitrate of mercury.

Smallpox and Re-vaccination.—Dr. A. B. Hall introduced the subject and asked questions which elicited the following remarks from Dr. Webb, recently in charge of the Smallpox Department of the City Hospital. He stated that of the applicants for admission at the hospital, a large portion had been vaccinated. The question was asked them on entrance, and they were always examined with reference to the scar of the operation. Dr. Webb had been led to give little heed to the scar of primary vaccination in making his diagnosis and prognosis; for many patients came with smallpox, having one, two or three apparently satisfactory scars. He had made a

large number of vaccinations within the past five years. With some people no amount of vaccination seemed to produce the vaccine disease or to ward off variola. He had often felt at a loss when to assure patients that they are protected. In one case, recently, he had vaccinated a lady, without effect, fifteen times, and on the sixteenth attempt had obtained three good vesicles, followed by good scars.

Dr. Webb had seen 23 cases where smallpox had occurred twice in the same patient and one three times. In one case a child, 4 or 5 years old, had had the disease in March, last, and three weeks ago he had seen the patient with the same disease, of which it died. A woman, who had been vaccinated eight years ago, had had varioloid four months ago, and afterward had hæmorrhagic smallpox, and died. It would seem, therefore, that some persons are so susceptible that neither vaccination or a previous attack of variola will protect them. Cases of hæmorrhagic smallpox in the female are almost always accompanied by bleeding from the uterus, whether it is time for the catamenia or not. Cases of this class very frequently show no external eruption whatever; but generally a few vesicles are found. These cases are almost always fatal. He had known of but one case only which had recovered. He mentioned the case of a man who was walking about his room with no other appearance on the skin than an erythema, who was dead eight hours later. Death took place from collapse or asthenia. Hæmorrhages took place from all the openings of the body; but he did not consider that the amount of blood lost entered into account in causing death. The patients apparently died, overpowered by the poison. He had known of patients dying almost instantly, while taking food or sitting up. In hæmorrhagic cases where no eruption is seen on the skin, the fauces generally show the characteristic vesicle. The temperature always ran high, up to 110° in fatal cases. He had seen no cases of death where the secondary fever was absent. Hæmorrhagic cases were less liable to spread the disease than the milder forms. With reference to humanized and bovine virus, Dr. Webb had noticed no difference in the time of formation of the vesicle, or in the general appearance; he had, however, noticed the large size of the bovine crust, and that this was retained on the arm several days longer than the crust from humanized virus. He now uses the animal virus; he is unable to decide which is the better fitted to ward

off smallpox. He had found the bovine matter more difficult to introduce in primary vaccinations.

Dr. Webb called attention to the great injury done by physicians in loosely using the term "varioid," giving patients the idea that the mild form of variola, commonly called varioloid, was of comparatively little importance and only moderately contagious. All cases which showed any manifestation of the disease should be classed as variola or smallpox.

Dr. Fitz reported an autopsy which he had made of a case of hæmorrhagic variola of thirty-six hours' duration, in a man who showed no variolous marks externally, and no papules or shotty feel; but merely an erythema universally. He found extravasations of blood in the lungs, œsophagus, liver, kidneys, bladder and elsewhere. These appearances corresponded with those observed in autopsies in Berlin; it has been noticed that no hæmorrhage has taken place into the small intestine.

Inverted Uterus.—Dr. Wheeler reported an interesting case of inverted uterus, which he had seen following immediately after an instrumental delivery, without any sufficient cause for such an accident. He had at once restored the organ to its place by taxis, unfolding the invagination from the cervix and ending with the fundus. Dr. W. deprecates the method which has been suggested of returning the fundus first.

Dr. Thompson related a case which had occurred in a patient of his some hours after delivery, in which he had reduced from the fundus. The patient died three or four days after.

CHLORAL FOR TOOTHACHE.—Dr. Page, in the *British Medical Journal*, recommends chloral hydrate as a local application in cases of toothache. A few grains of the solid hydrate introduced into the cavity of the tooth upon the point of a quill speedily dissolves there; and in the course of a few minutes, during which a not unpleasant warm sensation is experienced, the pain is either deadened, or more often effectually allayed. A second or third application may be resorted to, if necessary.—*The Druggist's Circular and Chemical Gazette.*

Various anodynes will answer the same purpose. Among others, iodoform in one grain doses is a very efficient remedy for dental and facial neuralgia.—*Medical Cosmos.*

Bibliographical Notices.

The Physiology of Man; Designed to represent the Existing State of Physiological Science as applied to the Functions of the Human Body. By AUSTIN FLINT, JR., M.D. Nervous System. One vol. 8vo. cloth. Pp. 470. New York: D. Appleton & Co. 1872.

This volume is the fourth in the series of physiological text-books published by the same author, and is devoted to the physiology of the nervous system. The author is evidently much more familiar with the works of French and English, than with those of German physiologists. This is the more to be regretted as the most important advances in physiological science during the last twenty years have been made in Germany. In this respect, however, the present volume is an improvement on its predecessors, some of the earlier volumes having been remarkable for an almost entire absence of references to German authorities, except in translations.

The first chapter of the work before us gives a very good, general description of the anatomy of the nervous system, including the central and peripheral terminations of the nerve fibres. Rather too much importance seems to be attached to the observations of Pflüger, on the terminations of nerves in glands, unsupported as they are by those of any other histologist. The last part of the chapter is devoted to the "Regeneration of Nervous Tissue." Here some account of the important experiments of Vulpian* on the regeneration of nerves after permanent separation from their centres might well have found a place.

In the second chapter, on "Motor and Sensory Nerves," the credit of discovering a functional difference between the anterior and posterior roots is bestowed, where it no doubt belongs, on Magendie instead of Charles Bell.

The third chapter, on the "General Properties of Nerves," is the most unsatisfactory in the volume. The action of electricity on nerves and the electrical phenomena observed in them are described in an extremely imperfect and confused manner. The importance of the negative variation of the electro-motor current as a measure of the functional activity of the nerve is not even alluded to, the interesting obser-

vations of Bernstein* in this department of physiology being entirely ignored.

In the next five chapters the physiology of the cranial nerves is very thoroughly discussed and the results of recent investigations very fairly presented. The following interesting observation of Dr. Mason, of Buffalo, on the inflammatory effects of the division of the fifth pair of cranial nerves is published apparently for the first time. "The fifth pair of nerves was divided in a cat in the ordinary way. By feeding the animal carefully with milk and finely-chopped meat the nutrition was maintained at a high standard, and no inflammation of the eye occurred for about four weeks. The supply of food was then diminished to about the quantity the animal would be able to take without any special care, when the eye became inflamed and perforation of the cornea and destruction of the organ followed."

The explanation offered by the author is that section of the fifth pair causes hyperæmia of the eye because the sympathetic fibres passing through the ganglion of Gasser are divided. A greater supply of nutritive material is, therefore, required from the blood in order to maintain the condition of exaggerated nutrition. The blood, however, is impoverished as the result of deficiency in the introduction of nutritive matter from paralysis of the muscles of mastication on one side. Hence inflammation and sloughing follow, unless the animal is artificially nourished. This theory does not explain the absence of similar effects after section of the sympathetic in the neck, nor take into account the experiments of Snellen,† showing that inflammation and destruction of the eye does not occur when it is protected by sewing the ear in front of it.

The functions of the pneumogastric nerve are discussed in considerable detail. In the account of its action upon the heart, no mention is made of the fact established by the observations of Coats‡ that the force, as well as the rapidity, of the heart-beats is diminished by irritation of the pneumogastric.

The conclusion of the author that the sense of the want of air is not transmitted to the nervous centres through the medium

* Über den zeitlichen Verlauf der negativen Schwankung des Nervenstroms. Archiv für die gesammte Physiologie, I., 173. Untersuchungen über den Erregungsvorgang im Nerven und Muskelsysteme. Heidelberg, 1871.

† Quoted by Longet, Traité de Physiologie, iii., 492.

‡ Berichte der mathem.-phys. Classe der k. s. Gesellschaft der Wissenschaften zu Leipzig, Bd. xxi., s. 360.

• *Leçons sur la Physiologie du Système Nerveux*, p. 270.

of the pneumogastric nerves seems scarcely justified by the experiments referred to.

In view of the greatly diminished rate of breathing which always follows section of these nerves, it seems more reasonable to infer that they are an important though not the only channel through which this sense is conveyed to the respiratory centres.

The following three chapters are devoted to the spinal cord, considered both as a conductor and as a nervous centre. The views of Brown-Séquard, on the decussation of sensory conductors in the cord, are adopted, but the experiments of Melscher* on the same subject are ignored. The author denies to the white substance of the cord all share in the conduction of sensitive impressions, a view which hardly seems in accordance with the teachings of pathology. Great stress is laid both in this connection and in treating of the functions of the encephalic centres, on the importance of reconciling pathological observations with physiological experiments. The power which the system possesses of adapting itself to changed conditions, provided the change takes place slowly, probably explains many of these discrepancies.

Section of a certain portion of the central nervous system may cause serious functional disturbances, while pathological degeneration of the same portion may produce no such results. We have here probably an analogous phenomenon to that which takes place in the circulatory system. The ligation of a large artery may cause mortification of the part supplied by it, while its gradual obstruction by a morbid growth may be harmless in its effects, owing to the collateral circulation replacing the direct.

In the chapter on the cerebrum, is a table giving the weight of the brain in quite a number of individuals of great intelligence, as well as in a number of idiots. In this list the names of Ruloff, the murderer, and the notorious James Fisk, Jr., follow directly after those of Cuvier and Abercrombie, and precede those of Spurzheim, Webster and Dupuytren. The pathology of aphasia is discussed, and the localization of the faculty of speech in the third frontal convolution of the left side is considered demonstrated. While giving due weight to all the positive evidence on this question, it is important to bear in mind that there are cases on record where an affection of this portion of the brain has not been fol-

lowed by aphasia. The celebrated "crowbar case," is probably one of this sort, though of course the exact extent of the injury to the brain can never be positively determined.

The functions of the cerebellum are discussed in the thirteenth chapter, and the conclusion adopted that this organ "presides over equilibration and the coördination of certain muscular movements, and is in some way connected with the generative function."

The tubercula quadrigemina are described as the centres of vision, though this can hardly be their only function, since these organs are as well developed in blind fishes as in fishes of allied species with eyes.* In the discussion of the so-called "nœud vital" of Flourens, death is very well described as the successive loss of physiological properties in the various tissues and organs.

The chapter on the sympathetic system is decidedly unsatisfactory, the recent observations of German physiologists being almost wholly ignored. No mention whatever is made of those nerves whose action is to dilate the vessels to which they are distributed.†

The last chapter of the work contains a good resumé of our knowledge of the phenomena of sleep. On the whole, this volume, though superior to the former ones in some respects, is still marked by many serious omissions, and, though containing much valuable information for the student of physiology, can scarcely be said "to represent the existing state of physiological science."

H. F. S.

On some Practical Points in the Treatment of Phymosis produced by Chancroidal Ulcers. By R. W. TAYLOR, M.D., Surgeon to the New York Dispensary, Department of Venereal and Skin Diseases. New York: T. W. Christern. 1872.

This is a re-print from the *American Journal of Syphilography and Dermatology*, Oct., 1872, and we feel warranted in recommending it to the careful perusal of all interested in this subject. It is more than a mere didactic essay, it has something new to bring forward.

The author alludes, first, to the cause of the phymosis, "chancroidal ulcers," and

* Zur Frage der sensiblen Leitung im Rückenmarke. Berichte der mathem.-phys. Classe der K. S. Gesellschaft der Wissenschaften zu Leipzig. Bd. xxii., S. 404.

• Prof. J. Wyman—Proceedings Boston Soc. Nat. Hist. Vol. 4, p. 395.

• Löwen Über die Erweiterung von Arterien in Folge einer Nervenregung. Berichte der Mathem.-phys. Classe der K. S. Gesellschaft der Wissenschaften zu Leipzig. Bd. xviii., S. 85.

remarks, most justly:—"Too much stress cannot be laid upon the injury done by injudicious cauterizations with the solid stick of nitrate of silver."

He divides phymosis into two stages—the early stage, that of hyperæmia with œdema; and the later stage, where the hyperæmia is accompanied by cell-infiltration of the connective tissue layer of the prepuce. He calls attention to the well-marked distinctions between the two, and to the necessity of employing differing methods of treatment.

His treatment of the former stage is a good example of the advantageous extension of the realm of conservative surgery, where its value is based on the proofs obtained by the large experience of modern specialism. Here, also, instead of *aliquid habeat*, expectants, alteratives, and the whole list of soluble trusts-in-God, a simple and sensible mechanical treatment, producing definite and certain results, is adopted, and carried out by means of a syringe devised by the author of this paper.

In the second stage palliatives are dangerous, not merely useless. Here an operation is needed, and the only question is, how shall it be done? The author answers the question, describes the instrument he has devised for the purpose, and gives his experience as to the subsequent treatment required.

Critically considered, this is a characteristically careful clinical contribution, and as such we cordially commend it. E. W.

The Physician's Visiting List for 1873.
Twenty-second year of its publication.
Philadelphia: Lindsay & Blakiston.

The Physician's Hand-Book for 1873. By
WILLIAM ELMER, M.D., and ALBERT D.
ELMER, M.D. New York: Wm. A.
Townsend.

THE two little volumes, so well known to practitioners of medicine, have again appeared on our table to remind us that we are near the beginning of a new year. We hold both these works in the highest esteem; both are eminently practical and are admirably arranged; both contain handy tables, and information of value; and either of them furnishes to the physician a vade mecum which he cannot well dispense with, as a reminder of daily duty, and a record of work accomplished.

They are for sale at this office and at the Old Corner Bookstore, 135 Washington Street.

A Year-Book of Therapeutics, Pharmacy and allied Sciences. Edited by HORATIO C. WOOD, JR., M.D., Prof. Med. Botany, University of Pennsylvania, &c. New York: William Wood & Co. 1872. Pp. 360.

THIS work is a compilation of the material published in the periodical called "New Remedies." It supplies a great amount of information on the most recent advances in therapeutics, materia medica and toxicology, together with sixty pages of selected formulæ and general receipts. The amount of labor involved in such a work, in the preparation of abstracts and in the judicious selection of matter, is obviously very extensive, and examination shows that the work has been done thoroughly and efficiently.

As a hand-book for references, this work will be found of much use to physicians, and a copious index has essentially added to its value in this respect.

TWO CASES OF CYSTICERCUS CELLULOSE IN THE HUMAN EYE (Dr. J. Hirschberg, of Berlin, *Virchow's Archives*, vol. liv., Parts 1 and 2).—In one case the worm was in the deep portion of the vitreous humor, in the other it was in the anterior chamber of the eye. After the worm had been detected by means of the ophthalmoscope, an incision was made in the sclerotic, as for the extraction of a cataract; then iridectomy was performed, and the crystalline lens was slowly and completely extracted while the patient was still in the horizontal position.

The upright position was then assumed, and a small hook was inserted into the vitreous body, and the entozoon dragged forward until it was visible to the unaided eye. By causing the patient to bend forward, the edges of the sclerotic wound were made to gape, and the worm slipped out upon the table. The wound healed by first intention, and the form of the eyeball has been completely retained.

The second case is important, since it demonstrates that the position of the parasite may be mistaken for one of the lamellæ of the cornea, when in reality it is in the anterior chamber of the eye. Both parasite and patient were very young; the former about 12 weeks, and the latter 2 years. An incision was made in the inferior portion of the cornea, and the cysticercus extracted head-foremost. Under gentle pressure and instillation of atropine the wound healed in two days, and the sight remains normal.

Medical and Surgical Journal.

BOSTON: THURSDAY, DECEMBER 5, 1872.

"ETHER VS. CHLOROFORM."

At the risk of seeming to recur too often to this question, though in reality it cannot be presented too often while it is a question of life or death to so many, we must express our gratification at the prospect of a thorough trial by English surgeons of the American method of administering ether. For this prospect we are chiefly indebted, whatever others may have done, to the unwearied labors of the *British Medical Journal*, in its "perseveringly seeking the records of all contemporaneous cases of fatality" by chloroform, and fearlessly publishing them. For years, we have pleaded, not for ether but against the unnecessary sacrifice of human life by the use of chloroform. Often disregarded, or derided as partisans, we have persisted, in the full belief that right reason would eventually assert its supremacy.

A long editorial in the *British Medical Journal* for November 2d, places the whole matter clearly and fairly before the profession, and calls upon surgeons and professed administrators of anæsthetics in England to give ether a "full, thoughtful and careful trial." These medical men cannot any longer resist the appeal now so forcibly made to them by the *Journal* of their own Medical Association. They must make the trial; and there is no fear as to the result, if they will only follow out the directions so often given in the *Boston Journal*, and demonstrated to them so recently by Dr. Jeffries, whose remarks on this point the *British* editor has re-printed. One caution, however, we feel constrained to give in passing, and that is, not to exclude atmospheric air *entirely*. From this cause, in some of the first administrations of ether by inhalers impervious to air, patients came near losing their lives by asphyxia, and the adoption of anæsthetics was greatly hazarded.

Such accidents cannot well happen if the "towel rolled into a cone," with a sponge

or rags crowded inside, be the only apparatus used.

To accoucheurs, also, we would suggest more careful observation of the effects of chloroform, as there is some reason to fear that their confidence in this agent has been misplaced.

The *British Medical Journal* gives full credit to the *Boston Medical and Surgical Journal* and to the *Lyon Médical*; to Dr. Jeffries, of Boston, and to Dr. Diday, of Lyons, for earnest and effective efforts in this matter. If, now that the case is so fully forced upon them, British surgeons do not apply themselves with diligence to its solution they may, though scoffing, find that there is more in the "final sentence of Dr. Diday's warm pleading," and in "extraneous considerations" which we have sometimes suggested to them, than is pleasant to contemplate.

We cannot better emphasize these observations than by presenting the recently published testimony of an English physician. His opinions are so clearly expressed and they bear upon them so plainly the stamp of sincerity that they are worth listening to.

In the *British Medical Journal* for Nov. 9th, Dr. Underhill, of Tipton, says:—

"Having recently returned from a visit to the United States, where I had good opportunities for inspecting most of the large hospitals and of seeing ether administered a great number of times, I am persuaded that the *advantages claimed* for it by our American brethren *are fully proved by facts*. During the whole of the time I was in the country—a period of nearly a year—I never saw or heard of a death which could be justly attributed to its use. . . . In a *very few instances* is the use of ether *followed by the sickness* we so constantly see after chloroform, provided a sufficient quantity have been given at first. I have carefully observed the pulse and respiratory functions in numerous instances, and have found them little, if at all, affected. Patients are undoubtedly rather longer, as a rule, in getting under its influence, and longer in recovering from its effects, and give one the impression of being excessive-

ly drunk. That the muscles are perfectly relaxed, I have had demonstrated over and over again. One thing alone would be sufficient, even were others wanting, to justify its more frequent use; and that is, that its administration need not be entrusted to skilled hands, but that almost any one can, in an emergency, give it without danger. I have failed to perceive the unpleasant smell noticed after its administration in some of the London hospitals, and believe this to have arisen from some impurity in the drug. The numerous failures which have followed its use in this country may probably be put down to the same cause. I believe the time to be close at hand when chloroform, except on special occasions, will be considered a thing of the past, and that the advantage of ether will be every day more conclusively demonstrated."

This manly and truthful statement of Dr. Underhill is conclusive, and must go far to remove the persistent prejudices of his countrymen. We have italicized a few points he makes which utterly disprove the objections they usually urge against the use of ether. In fact, in all essential particulars, ether is as good as chloroform. It needs in its administration only neatness, firmness and common-sense adaptations to individual cases. It is safe, while chloroform is deadly.

The editor of the *British Medical Journal* thus closes an article in the issue for November 16th:—

"In face of the great mortality from chloroform, and of the almost deathless record of ether, it has become our duty to interpose, to call the urgent attention of professional men throughout the country to the claims which ether has upon their confidence, and to urge that the anæsthetic which was thrust out of repute by the ready and convenient fluid introduced by Simpson, shall have an extended and fair trial. We are glad to find ourselves supported in this view by many experienced manipulators."

If the British Medical Profession do not give ether a fair trial, after all that has now been told them, they will deserve the reprobation of the civilized world.

From Continental Journals.

PERIARTHRITIS OF THE SHOULDER-JOINT.—In a recent number of *L'Union Médicale*, M. Duplay gives an interesting account of this affection, which, though of common occurrence, has been very imperfectly described in all works on surgery. He shows that when the disease is present, the movements of the joint vary materially from the normal type. If, for example, the patient is directed to raise both arms to the head alternately, it will be observed that, on the well side, the humerus attains a horizontal position without involving any appreciable motion of the acromion process of the scapula. On the affected side, on the other hand, by the time that the arm is raised high enough to form an angle of 45° with the trunk, the acromion process begins to follow the movement. It will also be noticed, moreover, that it is almost impossible to rotate the arm without involving the scapula in the motion. Other pathognomonic signs of the disease are crepitus and pain upon motion. When the patient is quiet he is usually comfortable, but pain is readily excited when pressure is applied to certain determined points, and this gives an important diagnostic sign for detecting this affection. The painful points are well determined, and may be described as—

1st. The edge of the acromion process, more particularly the posterior border, along the course of the circumflex nerve.

2d. The point of insertion of the deltoid muscle in the humerus.

3d. The vicinity of the coronoid process at the origin of the biceps muscle.

Still another symptom is the deformity of the shoulder which supervenes before the disease has existed very long. This is not, however, one of the early symptoms, and does not depend upon the extent of the peri-arthritis, but is due rather to the atrophy of the shoulder.

The disease is somewhat difficult to recognize, because so little has been written with regard to it. It has been confounded with fibrous ankylosis. In peri-arthritis, however, the adhesions are entirely outside the joint, and when in the course of treatment they are ruptured, in no instance has articular inflammation been thereby induced.

The most frequent cause of this affection is a contusion. At times, it has been known to come on after the dislocation of

the shoulder, the reduction of which presented no difficulty.

As to the prognosis, the trouble, when recognized, may be easily relieved. The indications are to rupture the abnormal adhesions which bind down the deltoid muscle to the humerus. These adhesions, being composed of firm bands of fibrous tissue, should be broken down at a single operation, and not by a series of gentle manipulations. The treatment consists, then, in simply rupturing the adhesions and in preventing their re-formation. The atrophy of the muscle should be treated by means of the cold douche, moderate exercise, and the application of electricity.

A CASE OF VAGINAL HERNIA.—Dr. Bruyne, of Sleydinge, Belgium, reports (*Ann. et Bull. de la Soc. de Med. de Gand*) a case of this rare form of hernia. A woman was struck on the head by a falling ladder, with sufficient force to produce temporary unconsciousness. No unusual symptom was noticed immediately after the accident, but in the course of ten days she began to experience a sensation of weight in the hypogastric region, accompanied by a bearing-down feeling in the region of the womb. A digital examination led to the discovery of a tumor of considerable magnitude, situated in the vagina. This was at first taken for a prolapsed womb, but a more careful examination showed that the tumor was not a displaced womb, nor was it caused by a prolapse of the mucous membrane of the vagina. The nature of the swelling, its resistance, the facility with which it could be replaced, and the rapidity with which it returned as soon as the hand was withdrawn, all indicated that the tumor was caused by a prolapse of the intestine into the vaginal canal. Having settled upon this diagnosis, Dr. Bruyne proceeded to reduce the hernia. For this purpose pessaries of several patterns were introduced, but without affording the desired relief. A permanent reduction was finally effected by means of the air-bag of Gariel, but to enable the patient to retain the bag it was found necessary to distend by means of water instead of air.

THE CAUSE OF SCURVY.—M. Leveir, in a lecture (*Jour. de Med. et Clin. Pract.*) based on an epidemic of scurvy under observation at the hospital at Ivry, maintains that scurvy is not due to the absence of vegetables, and vegetables are not indispensable to its removal; but the malady is the result of insufficient alimentation, in

bad hygienic conditions. Cold, humidity, excessive work, and depression of spirits, with deficient alimentation, ought to be considered the principal causes of scurvy.

In scurvy, the adipose tissue does not disappear; but the muscular system becomes fatty, the muscular striæ being replaced by fatty granulations, even the sarcolemma becoming absorbed.

The greatest number of recoveries occur in patients nourished on raw meat, without any intervention of vegetables.

Correspondence.

THE DISINFECTION OF ROOMS. *Messrs. Editors:*—I find in the last number of the JOURNAL some directions concerning the disinfection of rooms, which seem to me to be quite inadequate to effect the purpose. The subject is one of great practical interest just now. Among aerial disinfectants chlorine and sulphurous acid are most useful, but neither of these gases can be added to the air of a room in sufficient amounts to destroy the specific poison of smallpox without making the air irrespirable. Organic impurities of all kinds attach themselves to moist surfaces, and sulphurous acid gas seizes with avidity upon everything holding moisture. To completely disinfect a room, including its carpets, furniture and wall-paper, close the doors, windows and chimney; put from one to two pounds of brimstone (according to the size of the room) in an iron pot, pour over it a little alcohol, set it on fire, and leave the room for four hours. This process is injurious to the colors of many fabrics, and to gilded articles, and this injury corresponds in degree with the amount of moisture present in the room.

When disinfection by sulphur fumes is impracticable, the next best thing to do is to wet the carpet, furniture and walls with a strong solution of carbolic acid, one part in fifty of pure acid.

Clothing which can be washed may be disinfected by boiling in water for one hour.

Bedding, and clothing which cannot be washed, may be disinfected by exposure for four hours to dry heat at a temperature of 225° to 300° Fahr. This can be done in a large "brick oven;" but every city should have attached to its hospital for infectious diseases an oven specially arranged for the purpose.

Truly yours, GEO. DERBY, M.D.,
Prof. of Hygiene in Harvard University.

Medical Miscellany.

DR. DAREMBERG, author of the *Histoire des Sciences Medicales* and other works, and Professor of Medical History at the Faculty of Paris, died in that city, October 24th, at the comparatively early age of 55.

THE ABERDEEN MEDICAL STUDENT, a journal issued by the students at the University of Aberdeen, will be published in that city once a fortnight. Three members of the advanced class act as editors.

His friends in America will be glad to learn that Dr. Alex. Macalister, of Adelaide Hospital, Dublin, has been chosen to fill the new Professorship of Comparative Anatomy at Trinity College.

DR. FRANK P. FOSTER has resigned the office of House-physician of the New York Dispensary, and Dr. McBride succeeds him. Dr. Foster is appointed Director of Vaccination of the same Institution.

A NEW MONTHLY JOURNAL, devoted to scientific and practical medicine, is to appear in New York, under the care of an eminent gentleman whose name itself is a guaranty of merit of the highest order.

THE CENSUS REPORT.—The second volume of the census report, which will shortly be issued by Government, will be devoted to vital statistics. It will contain a series of maps illustrating the locality and character of diseases, together with the climatic and physical conditions which affect them.

SMALLPOX NURSES, both male and female, are in demand at this time. Nurses who are willing to take charge of patients affected with smallpox will confer a favor by notifying the editor of this JOURNAL.

THE BRITISH MEDICAL ACT.—The case of the man named Andrews, indicted in the English courts for unlawfully taking and using the name and title of a physician, has again been brought to notice on his appeal from the decision made by the justices. The appeal was not sustained in Court of Exchequer to which it was carried. We congratulate Dr. Jukes Styrap, of Shrewsbury, England, for the able manner in which he conducted the case as public prosecutor in behalf of the Shropshire Branch of the British Medical Association.

THE MUSEUM OF DERMATOLOGY AND SYPHILIS, at No. 24 Charles Street, has been augmented the past week by the addition of sixty new specimens. It is now completed, and is at the present moment literally the finest in the world, since, in the words of the artist, Baretta, "it equals in point of numbers and far surpasses in perfection of workmanship the Museum of the St. Louis Hospital," in Paris, hitherto considered unrivalled.

The Museum will be presented to the Harvard Medical School as soon as its new fire-proof building is erected. The Museum is temporarily at 24 Charles Street, and is open for the inspection of medical men daily from 1 to 3 P.M. EDWARD WIGGLESWORTH, JR.,
Custodian.

WE learn that Mr. Druiit, of London, the Editor of the *Medical Times and Gazette*, and the author of several valuable professional works, is obliged by the state of his health to retire from active practice, for a time at least. A meeting of the leading men of the profession has been held, with a view to proper recognition of his eminent services.

THE Medical Society of London will shortly move its quarters to 10 Chandos Street, Cavendish Square, in consequence of the lease of the present house in George Street having expired.

BOOKS RECEIVED.—A System of Oral Surgery: being a consideration of the Diseases and Surgery of the Mouth, Jaws and associate parts. By James E. Garretson, M.D., D.D.S., Oral Surgeon to the Medical Department of the University of Pennsylvania, &c. Philadelphia: J. B. Lippincott & Co. 1873. Pp. 1091.

PAMPHLETS RECEIVED.—Report of the Surgeon-General, United States Army. 1872. Pp. 11.

MARRIED.—In this city, 4th inst., John Homans, M.D., to Miss Helen Perkins.—4th inst., Thomas Waterman, M.D., to Miss Hattie H. Howard.

Deaths in sixteen Cities and Towns of Massachusetts, for the week ending Nov. 23, 1872.

Cities and Towns.	No. of Deaths.
Boston	151
Charlestown	19
Worcester	17
Lowell	19
Milford	4
Chelsea	4
Cambridge	19
Salem	6
Lawrence	12
Springfield	6
Lynn	13
Gloucester	8
Fitchburg	3
Newburyport	3
Somerville	6
Haverhill	2
	291

Prevalent Diseases.

Smallpox	55
Consumption	46
Typhoid Fever	19
Pneumonia	17
Scarlet Fever	10
Diphtheria and Croup	8

The deaths from smallpox were as follows:—Boston forty-seven, Charlestown four, Cambridge three, and Chelsea one.

GEORGE DEERY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, November 30th, 1872. Males, 92; females, 84. Accident, 3—abscess, 1—apoplexy, 1—asthma, 2—aneurism, 1—inflammation of the bowels, 2—bronchitis, 7—inflammation of the brain, 3—congestion of the brain, 1—disease of the brain, 2—burned, 1—cancer, 1—canker, 1—consumption, 22—cystitis, 1—debility, 2—diarrhoea, 1—dropsy, 4—dropsy of brain, 2—diphtheria, 1—scarlet fever, 6—typhoid fever, 5—gastritis, 1—disease of the heart, 4—jaundice, 1—intemperance, 1—disease of the kidneys, 3—disease of the knee-joint, 1—disease of the liver, 5—congestion of the lungs, 4—inflammation of the lungs, 11—marasmus, 4—old age, 5—prostatitis, 1—paralysis, 3—premature birth, 1—puerperal disease, 1—pyemia, 2—scalded, 1—scrofula, 1—smallpox, 53—syphilis, 1—unknown, 1.

Under 5 years of age, 48—between 5 and 20 years, 21—between 20 and 40 years, 55—between 40 and 60 years, 30—above 60 years, 22. Born in the United States, 93—Ireland, 41—other places, 37.